INDEX TO AUTHORS

A

Alexander, Benjamin. See *Gutman and Alexander*, 527

Anderson, Ernest, and **Lowe, Harry J.** The composition of flaxseed mucilage, 289

Anfinsen, Christian B., Beloff, Anne, Hastings, A. Baird, and **Solomon, A. K.** The *in vitro* turnover of dicarboxylic amino acids in liver slice proteins, 771

—. See *Ball, Anfinsen, and Cooper*, 257

Angier, R. B. See *Hutchings, Stokstad, Boothe, Mowat, Waller, Angier, Semb, and SubbaRow*, 705

Armstrong, Marvin D., and **du Vigneaud, Vincent.** A new synthesis of djenkolic acid, 373

Asper, Samuel P., Jr., Schales, Otto, and **Schales, Selma S.** Importance of controlling pH in the Schales and Schales method of chloride determination, 779

B

Baer, John E. See *Brodie, Udenfriend, and Baer*, 299

Ball, Eric G., Anfinsen, Christian B., and **Cooper, Octavia.** The inhibitory action of naphthoquinones on respiratory processes, 257

Banerjee, Sachchidananda, and **Ghosh, Naresh Chandra.** Relation of scurvy to glucose tolerance test, liver glycogen, and insulin content of pancreas of guinea pigs, 207

Barker, H. A. See *Doudoroff, Barker, and Hassid*, 725

—. See *Doudoroff, Hassid, and Barker*, 733

Barnes, Richard H. See *Lundberg, Barnes, Clausen, Larson, and Burr*, 379

Baumann, C. A. See *Pearce, Sauberlich, and Baumann*, 271

Beloff, Anne. See *Anfinsen, Beloff, Hastings, and Solomon*, 771

Bessey, Otto A., Lowry, Oliver H., and **Brock, Mary Jane.** The quantitative determination of ascorbic acid in small amounts of white blood cells and platelets, 197

Bezer, Ada E. See *Kabat, Heidelberger, and Bezer*, 629

Block, Harriette. See *Dunn, Camien, Shankman, and Block*, 43

—. See *Dunn, Shankman, Camien, and Block*, 1

—. See *Shankman, Camien, Block, Merrifield, and Dunn*, 23

Block, Walter D., and **Geib, Naomi C.** An enzymatic method for the determination of uric acid in whole blood, 747

Bonsnes, Roy W. The plasma amino acid and amino nitrogen concentration during normal pregnancy, labor, and early puerperium, 345

Boothe, J. H. See *Hutchings, Stokstad, Boothe, Mowat, Waller, Angier, Semb, and SubbaRow*, 705

Borsook, Henry, and **Dubnoff, Jacob W.** The hydrolysis of phosphocreatine and the origin of urinary creatinine, 493

— and —. Synthesis of hippuric acid in liver homogenate, 397

Brandon, Beatrice A. See *Fraenkel-Conrat, Brandon, and Olcott*, 99

Brew, Eleanor M. See *Bonsnes*, 345

Brewer, George E. F., Brown, W. S., Harvey, Cecil C., and **Horwitt, M. K.** Variations of the individual blood plasma amino acid nitrogen level, 145

Brock, Mary Jane. See *Bessey, Lowry, and Brock*, 197

Brodie, Bernard B., Udenfriend, Sidney, and **Baer, John E.** The estimation of basic organic compounds in biological material. I. General principles, 299

—, —, and **Dill, Wesley.** The estimation of basic organic compounds in biological material. V. Estimation by salt formation with methyl orange, 335

Brodie, Bernard B., Udenfriend, Sidney, Baer, John E., and **Chenkin, Theodore.** The estimation of basic organic compounds in biological material. III. Estimation by conversion to fluorescent compounds, 319

—, —, —, and **Downing, George.** The estimation of basic organic compounds in biological material. II. Estimation of fluorescent compounds, 311

—, —, and **Taggart, John V.** The estimation of basic organic compounds in biological material. IV. Estimation by coupling with diazonium salts, 327

—. See *Josephson, Udenfriend, and Brodie,* 341

Brown, W. S. See *Brewer, Brown, Harvey, and Horwitt,* 145

Brückmann, Gerhard, and **Wertheimer, E.** Alloxan studies: the action of alloxan homologues and related compounds, 241

Burr, George O. See *Lundberg, Barnes, Clausen, Larson, and Burr,* 379

Bywater, W. G. See *Rittenberg, Sternberg, and Bywater,* 183

C

Camien, Merrill N., Dunn, Max S., and **Safle, A. J.** The effect of carbohydrates on acid production by twenty-four lactic acid bacteria, 33

—. See *Dunn, Camien, Shankman, and Block,* 43

—. See *Dunn, Shankman, Camien, and Block,* 1

—. See *Shankman, Camien, Block, Merrifield, and Dunn,* 23

—. See *Shankman, Camien, and Dunn,* 51

Carpenter, Frederick H. See *Craig, Hogeboom, Carpenter, and du Vigneaud,* 665

Carter, Herbert E., Loo, Y. H., and **Skell, P. S.** Streptomycin. The linkage between streptidine and streptobiosamine, 401

Caster, W. O. See *Mickelsen, Caster, and Keys,* 415

Chaikoff, I. L., Entenman, C., and **Montgomery, M. Laurence.** The mechanism of action of the antifatty liver factor of the pancreas. III. A comparison of hydrolyzed and unhydrolyzed casein in the prevention of fatty livers of the completely depancreatized dog maintained with insulin, 177

—. See *Hanahan and Chaikoff,* 233

Chargaff, Erwin. See *Vischer and Chargaff,* 781

Chenkin, Theodore. See *Brodie, Udenfriend, Dill, and Chenkin,* 319

Chilcote, Max E. See *Tweedy, Chilcote, and Patras,* 597

Christensen, Halvor N., Cooper, Paul Fenimore, Jr., Johnson, Roswell D., and **Lynch, Eleanor L.** Glycine and alanine concentrations of body fluids; experimental modification, 191

Clausen, Marion. See *Lundberg, Barnes, Clausen, Larson, and Burr,* 379

Cohen, Sanford. See *Schwartz, Hawkinson, Cohen, and Watson,* 133

Cohen, Seymour S. Streptomycin and desoxyribonuclease in the study of variations in the properties of a bacterial virus, 511

— and **Fowler, Catherine B.** On the reported stimulation of bacteriophage synthesis by indole-3-acetic acid, 775

Colowick, Sidney P., Cori, Gerty T., and **Slein, Milton W.** The effect of adrenal cortex and anterior pituitary extracts and insulin on the hexokinase reaction, 583

Cooper, Octavia. See *Ball, Anfinsen, and Cooper,* 257

Cooper, Paul Fenimore, Jr. See *Christensen, Cooper, Johnson, and Lynch,* 191

Cori, Gerty T. See *Colowick, Cori, and Slein,* 583

Craig, Lyman C., Hogeboom, George H., Carpenter, Frederick H., and **du Vigneaud, Vincent.** Separation and characterization of some penicillins by the method of counter-current distribution, 665

—. See *Williamson and Craig,* 687

D

Dann, W. J., and **Huff, Jesse W.** Dinicotinylornithine: a metabolite of nicotinamide in the chicken, 121

Davis, A. K. See *Overman and Davis*, 641

Dill, Wesley. See *Brodie, Udenfriend, and Dill*, 335

—. See *Brodie, Udenfriend, Dill, and Chenkin*, 319

—. See *Brodie, Udenfriend, Dill, and Downing*, 311

Doudoroff, Michael, Barker, H. A., and **Hassid, W. Z.** Studies with bacterial sucrose phosphorylase. I. The mechanism of action of a sucrose phosphorylase as a glucose-transferring enzyme (transglucosidase), 725

—, **Hassid, W. Z.,** and **Barker, H. A.** Studies with bacterial sucrose phosphorylase. II. Enzymatic synthesis of a new reducing and of a new nonreducing disaccharide, 733

Downing, George. See *Brodie, Udenfriend, Dill, and Downing*, 311

Drabkin, David L., and Marsh, Julian B. Increased liver phosphatase activity in alloxan-diabetic rats, 777

—. See *Marsh and Drabkin*, 61

Dubnoff, Jacob W. See *Borsook and Dubnoff*, 397, 493

Dunn, Max S., Camien, Merrill N., Shankman, S., and **Block, Harriette.** The determination of *d*(−)- and *l*(+)-glutamic acid in protein hydrolysates, 43

—, **Shankman, S., Camien, Merrill N.,** and **Block, Harriette.** The amino acid requirements of twenty-three lactic acid bacteria, 1

—. See *Camien, Dunn, and Salle*, 33

—. See *Shankman, Camien, Block, Merrifield, and Dunn*, 23

—. See *Shankman, Camien, and Dunn*, 51

E

Edman, Pehr. The action of tyrosinase on chymotrypsin, trypsin, and pepsin, 367

Ellis, Gordon H. See *Gates and Ellis*, 537

Entenman, C. See *Chaikoff, Entenman, and Montgomery*, 177

F

Fowler, Catherine B. See *Cohen and Fowler*, 775

Fraenkel-Conrat, Heinz, Brandon, Beatrice A., and **Olcott, Harold S.** The reaction of formaldehyde with proteins. IV. Participation of indole groups. Gramicidin, 99

Fried, Josef, and **Titus, Elwood.** Streptomycin B, an antibiotically active constituent of streptomycin concentrates, 391

—. See *Titus and Fried*, 393

Friedberg, Felix, and **Greenberg, David M.** Endocrine regulation of amino acid levels in blood and tissues, 405

— and —. Partition of intravenously administered amino acids in blood and tissues, 411

G

Gates, Elizabeth M., and **Ellis, Gordon H.** A microcolorimetric method for the determination of manganese in biological materials with 4,4′-tetramethyldiaminotriphenylmethane, 537

Geib, Naomi C. See *Block and Geib*, 747

Ghosh, Naresh Chandra. See *Banerjee and Ghosh*, 207

Goddard, William B. See *Marsh and Drabkin*, 61

Graham, Claire E., Smith, Edward P., Hier, Stanley W., and **Klein, David.** An improved method for the determination of tryptophane with *p*-dimethylaminobenzaldehyde, 711

Grau, C. R. The phenylalanine and tyrosine contents of chicks and eggs, 485

Greenberg, David M. See *Friedberg and Greenberg*, 405, 411

Grossman, William I. See *Knox and Grossman*, 363

de Grunigen, Anna. See *Hutchings, Stokstad, Boothe, Mowat, Waller, Angier, Semb, and SubbaRow*, 705

Gutman, George E., and **Alexander, Benjamin.** Studies of amino acid metabolism. I. Blood glycine and alanine and their relationship to the total amino acids in normal subjects, 527

H

Hanahan, Donald J., and **Chaikoff, I. L.** The phosphorus-containing lipides of the carrot, 233

Harfenist, Morton. See *Pace, Kline, Schachman, and Harfenist*, 459

Harvey, Cecil C. See *Brewer, Brown, Harvey, and Horwitt*, 145

Hassid, W. Z. See *Doudoroff, Barker, and Hassid*, 725

—. See *Doudoroff, Hassid, and Barker*, 733

Hastings, A. Baird. See *Anfinsen, Beloff, Hastings, and Solomon*, 771

Hawkinson, Violet. See *Schwartz, Hawkinson, Cohen, and Watson*, 133

Heidelberger, Michael. See *Kabat, Heidelberger, and Bezer*, 629

Hier, Stanley W. See *Graham, Smith, Hier, and Klein*, 711

Hills, Claude H., and **Mottern, H. H.** Properties of tomato pectase, 651

Hoff-Jørgensen, E., Williams, William L., and **Snell, Esmond E.** Preferential utilization of lactose by a strain of *Lactobacillus bulgaricus*, 773

Hogeboom, George H. See *Craig, Hogeboom, Carpenter, and du Vigneaud*, 665

Horwitt, M. K. See *Brewer, Brown, Harvey, and Horwitt*, 145

Huff, Jesse W. See *Dann and Huff*, 121

Hutchings, B. L., Stokstad, E. L. R., Boothe, J. H., Mowat, J. H., Waller, C. W., Angier, R. B., Semb, J., and **SubbaRow, Y.** A chemical method for the determination of pteroylglutamic acid and related compounds, 705

J

Johnson, Roswell D. See *Christensen, Cooper, Johnson, and Lynch*, 191

Josephson, Edward S., Udenfriend, Sidney, and **Brodie, Bernard B.** The estimation of basic organic compounds in biological material. VI. Estimation by ultraviolet spectrophotometry, 341

Jukes, Thomas H., and **Stokstad, E. L. R.** The comparative utilization of pteroylglutamic acid and pteroyltriglutamic acid by chicks on a purified diet, 563

Junowicz-Kocholaty, Renate, and **Kocholaty, Walter.** Two antibiotics (lavendulin and actinorubin) produced by two strains of *Actinomyces*. II. Purification and isolation, 757

—, —, and **Kelner, Albert.** Sulfactin, a new antibiotic substance produced by a soil *Actinomyces*, 765

K

Kabat, Elvin A., Heidelberger, Michael, and **Bezer, Ada E.** A study of the purification and properties of ricin, 629

Kelner, Albert. See *Junowicz-Kocholaty, Kocholaty, and Kelner*, 765

Keys, Ancel. See *Mickelsen, Caster, and Keys*, 415

Klein, David. See *Graham, Smith, Hier, and Klein*, 711

Kline, Leo. See *Pace, Kline, Schachman, and Harfenist*, 459

Klotz, I. M., and **Tietze, Frank.** Inhibition of oxidation of succinic acid by structurally related sulfonic acids, 399

Knox, W. Eugene, and **Grossman, William I.** The isolation of the 6-pyridone of N^1-methylnicotinamide from urine, 363

Kocholaty, Walter. See *Junowicz-Kocholaty and Kocholaty*, 757

—. See *Junowicz-Kocholaty, Kocholaty, and Kelner*, 765

L

Larson, Norma. See *Lundberg, Barnes, Clausen, Larson, and Burr*, 379

LePage, G. A. Preparation of diphosphopyridine nucleotide, 623

Levey, Stanley, and **Lewis, Howard B.** The metabolism of phenoxyacetic acid, its homologues, and some monochlorophenoxyacetic acids. New examples of β oxidation, 213

Lewis, Howard B. See *Levey and Lewis*, 213

—. See *Schofield and Lewis*, 439

L'Heureux, Maurice V., Tepperman, Helen M., and **Wilhelmi, Alfred E.** A new preparation of the parathyroid hormone, 167

—. See *Tepperman, L'Heureux, and Wilhelmi*, 151

Loo, Y. H. See *Carter, Loo, and Skell*, 401

Lotspeich, W. D., and **Pitts, R. F.** The rôle of amino acids in the renal tubular secretion of ammonia, 611

Lowe, Harry J. See *Anderson and Lowe*, 289

Lowry, Oliver H. See *Bessey, Lowry, and Brock*, 197

Lundberg, W. O., Barnes, Richard H., Clausen, Marion, Larson, Norma, and **Burr, George O.** The deposition and antioxygenic behavior of α-, β-, and γ-tocopherols in rat fats, 379

Lynch, Eleanor L. See *Christensen, Cooper, Johnson, and Lynch*, 191

M

Man, Evelyn B., and **Siegfried, Dorothy A.** Notes on the use of redistilled water and of amylose in the estimation of serum iodine, 119

Marsh, Julian B., and **Drabkin, David L.** Kidney phosphatase in alimentary hyperglycemia and phlorhizin glycosuria. A dynamic mechanism for renal threshold for glucose, 61

—. See *Drabkin and Marsh*, 777

Mason, Howard S. The chemistry of melanin. II. The oxidation of dihydroxyphenylalanine by mammalian dopa oxidase, 433

McCaulay, Carley. See *Samuels, McCaulay, and Sellers*, 477

Merrifield, R. Bruce. See *Shankman, Camien, Block, Merrifield, and Dunn*, 23

Mickelsen, Olaf, Caster, W. O., and **Keys, Ancel.** A statistical evaluation of the thiamine and pyramin excretions of normal young men on controlled intakes of thiamine, 415

Montgomery, M. Laurence. See *Chaikoff, Entenman, and Montgomery*, 177

Morehouse, Margaret G. See *Weinmann, Morehouse, and Winzler*, 717

Mottern, H. H. See *Hills and Mottern*, 651

Mowat, J. H. See *Hutchings, Stokstad, Boothe, Mowat, Waller, Angier, Semb, and SubbaRow*, 705

N

Nachmansohn, David. See *Rothenberg and Nachmansohn*, 223

Neuman, William F., and **Riley, Richard F.** The uptake of radioactive phosphorus by the calcified tissues of normal and choline-deficient rats, 545

O

Olcott, Harold S. See *Fraenkel-Conrat, Brandon, and Olcott*, 99

Overman, Richard R., and **Davis, A. K.** The application of flame photometry to sodium and potassium determinations in biological fluids, 641

P

Pace, Nello, Kline, Leo, Schachman, Howard K., and **Harfenist, Morton.** Studies on body composition. IV. Use of radioactive hydrogen for measurement *in vivo* of total body water, 459

Pangborn, Mary C. The composition of cardiolipin, 351

Patras, Mary C. See *Tweedy, Chilcote, and Patras*, 597

Pearce, E. L., Sauberlich, H. E., and **Baumann, C. A.** Amino acids excreted by mice fed incomplete proteins, 271

Pearson, P. B. See *Schweigert and Pearson*, 555

Pitts, R. F. See *Lotspeich and Pitts*, 611

R

Riley, Richard F. See *Neuman and Riley*, 545

Rittenberg, S. C., Sternberg, H. E., and **Bywater, W. G.** The rapid estimation of tyrothricin in fermentation liquors, 183

Rodney, Gertrude, Swendseid, Marian E., and **Swanson, Ann L.** Tyrosine oxidation by livers from rats with a sulfasuxidine-induced pteroylglutamic acid deficiency, 395

Rothen, Alexandre. Immunological reactions between films of antigen and antibody molecules, 75

Rothenberg, Mortimer A., and **Nachmansohn, David.** Studies on cholinesterase. III. Purification of the enzyme from electric tissue by fractional ammonium sulfate precipitation, 223

S

Salle, A. J. See *Camien, Dunn, and Salle*, 33

Saltzman, Abraham. Fluorophotometric estimation of stilbamidine in urine and blood, 699

Samuels, Leo T. Metabolism of steroids by tissues. I. Determination of testosterone and related steroids in tissue extracts, 471

—, **McCaulay, Carley,** and **Sellers, Dorothy M.** Metabolism of steroids by tissues. II. The enzymic destruction of testosterone by liver tissue, 477

Sauberlich, H. E. See *Pearce, Sauberlich, and Baumann*, 271

Schachman, Howard K. See *Pace, Kline, Schachman, and Harfenist*, 459

Schales, Otto. See *Asper, Schales, and Schales*, 779

Schales, Selma S. See *Asper, Schales, and Schales*, 779

Schofield, Frances A., and **Lewis, Howard B.** A comparative study of the metabolism of α-alanine, β-alanine, serine, and isoserine. I. Absorption from the gastrointestinal tract, 439

Schwartz, Samuel, Hawkinson, Violet, Cohen, Sanford, and **Watson, Cecil James.** A micromethod for the quantitative determination of the urinary coproporphyrin isomers (I and III), 133

Schweigert, B. S. The rôle of vitamin B_6 in the synthesis of tryptophane from indole and anthranilic acid by *Lactobacillus arabinosus*, 283

— and **Pearson, P. B.** Effect of vitamin B_6 deficiency on the ability of rats and mice to convert tryptophane to N^1-methylnicotinamide and nicotinic acid, 555

Sellers, Dorothy M. See *Samuels, McCaulay, and Sellers*, 477

Semb, J. See *Hutchings, Stokstad, Boothe, Mowat, Waller, Angier, Semb, and SubbaRow*, 705

Shankman, S., Camien, Merrill N., Block, Harriette, Merrifield, R. Bruce, and **Dunn, Max S.** Vitamin requirements of twenty-three lactic acid bacteria, 23

—, —, and **Dunn, Max S.** The determination of glycine in protein hydrolysates with *Leuconostoc mesenteroides* P-60, 51

—. See *Dunn, Camien, Shankman, and Block*, 43

—. See *Dunn, Shankman, Camien, and Block*, 1

Siegfried, Dorothy A. See *Man and Siegfried*, 119

Skell, P. S. See *Carter, Loo, and Skell*, 401

Slein, Milton W. See *Colowick, Cori, and Slein*, 583

Smith, Edward P. See *Graham, Smith, Hier, and Klein*, 711

Snell, Esmond E. See *Hoff-Jørgensen, Williams, and Snell*, 773

Solomon, A. K. See *Anfinsen, Beloff, Hastings, and Solomon*, 771

Soyenkoff, Basil. A micromethod of phosphate determination, 447

Speck, John F. The enzymic synthesis of glutamine, 403

Sternberg, H. E. See *Rittenberg, Sternberg, and Bywater*, 183

Stetten, DeWitt, Jr. See *Weil and Stetten*, 129
Stokstad, E. L. R. See *Hutchings, Stokstad, Boothe, Mowat, Waller, Angier, Semb, and SubbaRow*, 705
—. See *Jukes and Stokstad*, 563
SubbaRow, Y. See *Hutchings, Stokstad, Boothe, Mowat, Waller, Angier, Semb, and SubbaRow*, 705
Swanson, Ann L. See *Rodney, Swendseid, and Swanson*, 395
Swendseid, Marian E. See *Rodney, Swendseid, and Swanson*, 395

T

Taggart, John V. See *Brodie, Udenfriend, and Taggart*, 327
Tepperman, Helen M., L'Heureux, Maurice V., and **Wilhelmi, Alfred E.** The estimation of parathyroid hormone activity by its effect on serum inorganic phosphorus in the rat, 151
—. See *L'Heureux, Tepperman, and Wilhelmi*, 167
Tietze, Frank. See *Klotz and Tietze*, 399
Titus, Elwood, and **Fried, Josef.** The use of "counter-current distribution" for the analysis of streptomycin preparations, 393
—. See *Fried and Titus*, 391
Tweedy, Wilbur R., Chilcote, Max E., and **Patras, Mary C.** The distribution, retention, and excretion of radiophosphorus following thyroparathyroidectomy, or bilateral nephrectomy, and the administration of parathyroid extract, 597

U

Udenfriend, Sidney. See *Brodie, Udenfriend, and Baer*, 299
—. See *Brodie, Udenfriend, and Dill*, 335
—. See *Brodie, Udenfriend, Dill, and Chenkin*, 319
—. See *Brodie, Udenfriend, Dill, and Downing*, 311
Udenfriend Sidney. See *Brodie, Udenfriend, and Taggart*, 327
—. See *Josephson, Udenfriend, and Brodie*, 341

V

du Vigneaud, Vincent. See *Armstrong and du Vigneaud*, 373
—. See *Craig, Hogeboom, Carpenter, and du Vigneaud*, 665
Vischer, Ernst, and **Chargaff, Erwin.** The separation and characterization of purines in minute amounts of nucleic acid hydrolysates, 781

W

Wainio, W. W. The oxidation of phosphorylated and non-phosphorylated sugars by mammalian liver, 569
Waller, C. W. See *Hutchings, Stokstad, Boothe, Mowat, Waller, Angier, Semb, and SubbaRow*, 705
Watson, Cecil James. See *Schwartz, Hawkinson, Cohen, and Watson*, 133
Weil, Rudolf, and **Stetten, DeWitt, Jr.** The urinary excretion of a fat-mobilizing agent, 129
Weinmann, Ernest O., Morehouse, Margaret G., and **Winzler, Richard J.** The effect of succinic dehydrogenase on deuterium-labeled succinic acid in the absence of hydrogen acceptors, 717
Wertheimer, E. See *Brückmann and Wertheimer*, 241
Wilhelmi, Alfred E. See *L'Heureux, Tepperman, and Wilhelmi*, 167
—. See *Tepperman, L'Heureux, and Wilhelmi*, 151
Williams, William L. See *Hoff-Jørgensen, Williams, and Snell*, 773
Williamson, Byron, and **Craig, Lyman C.** Identification of small amounts of organic compounds by distribution studies. V. Calculation of theoretical curves, 687
Winzler, Richard J. See *Weinmann, Morehouse, and Winzler*, 717

INDEX TO SUBJECTS

A

Acetic acid: Indole-3-, bacteriophage synthesis, effect, *Cohen and Fowler*, 775
Monochlorophenoxy-, metabolism, *Levey and Lewis*, 213
Phenoxy-, metabolism, *Levey and Lewis*, 213

Acid(s): Production, lactic acid bacteria, carbohydrate effect, *Camien, Dunn, and Salle*, 33

Actinomyces: Actinorubin production, *Junowicz-Kocholaty and Kocholaty*, 757
Lavendulin production, *Junowicz-Kocholaty and Kocholaty*, 757
Sulfactin production, *Junowicz-Kocholaty, Kocholaty, and Kelner*, 765

Actinorubin: *Actinomyces*-produced, *Junowicz-Kocholaty and Kocholaty*, 757

Adrenal(s): Cortex, hexokinase reaction, effect, *Colowick, Cori, and Slein*, 583

Alanine: α-, absorption, gastrointestinal tract, *Schofield and Lewis*, 439
—, metabolism, *Schofield and Lewis*, 439
β-, absorption, gastrointestinal tract, *Schofield and Lewis*, 439
—, metabolism, *Schofield and Lewis*, 439
Blood, total amino acids, relation, *Gutman and Alexander*, 527
Body fluids, *Christensen, Cooper, Johnson, and Lynch*, 191
Dihydroxyphenyl-, oxidation, dopa oxidase effect, *Mason*, 433
Phenyl-. *See* Phenylalanine

Alloxan: Diabetes, liver phosphatase, effect, *Drabkin and Marsh*, 777
Homologues and related compounds, metabolism, *Brückmann and Wertheimer*, 241

Amino acid(s): Ammonia secretion, kidney tubules, rôle, *Lotspeich and Pitts*, 611

Amino acid(s)—*continued:*
Blood, endocrine regulation, *Friedberg and Greenberg*, 405
—, glycine and alanine relation, *Gutman and Alexander*, 527
—, intravenous administration, effect, *Friedberg and Greenberg*, 411
Dicarboxylic, liver proteins, turnover, *in vitro*, *Anfinsen, Beloff, Hastings, and Solomon*, 771
Excretion, dietary protein effect, *Pearce, Sauberlich, and Baumann*, 271
Lactic acid bacteria, requirements, *Dunn, Shankman, Camien, and Block*, 1
Metabolism, *Gutman and Alexander*, 527
Nitrogen, blood plasma, *Brewer, Brown, Harvey, and Horwitt*, 145
—, — —, pregnancy, labor, and puerperium, *Bonsnes*, 345
Tissues, endocrine regulation, *Friedberg and Greenberg*, 405
—, intravenous administration, effect, *Friedberg and Greenberg*, 411

Amino nitrogen: Blood plasma, pregnancy, labor, and puerperium, *Bonsnes*, 345

Ammonia: Secretion, kidney tubules, acid rôle, *Lotspeich and Pitts*, 611

Amylose: Blood serum iodine determination, use, *Man and Siegfried*, 119

Anthranilic acid: Tryptophane synthesis from, by *Lactobacillus arabinosus*, vitamin B_6 rôle, *Schweigert*, 283

Antibody: Molecules, antigen films and, immunological reactions, *Rothen*, 75

Antigen: Films and antibody molecules, immunological reactions, *Rothen*, 75

Ascorbic acid: Blood cells, white, determination, micro-, *Bessey, Lowry, and Brock*, 197
— platelets, determination, micro-, *Bessey, Lowry, and Brock*, 197

B

Bacillus: *See also Lactobacillus*
Bacteria: Lactic acid, acid production, carbohydrate effect, *Camien, Dunn, and Salle,* 33
——, amino acid requirements, *Dunn, Shankman, Camien, and Block,* 1
——, vitamin requirements, *Shankman, Camien, Block, Merrifield, and Dunn,* 23
Sucrose phosphorylase, *Doudoroff, Barker, and Hassid,* 725
Doudoroff, Hassid, and Barker, 733
Virus, properties, streptomycin and desoxyribonuclease in study, *Cohen,* 511
See also Leuconostoc
Bacteriophage: Synthesis, indole-3-acetic acid effect, *Cohen and Fowler,* 775
Benzaldehyde: *p*-Dimethylamino-, tryptophane determination, use in, *Graham, Smith, Hier, and Klein,* 711
Blood: Alanine, total amino acids, relation, *Gutman and Alexander,* 527
Amino acids, endocrine regulation, *Friedberg and Greenberg,* 405
——, glycine and alanine relation, *Gutman and Alexander,* 527
——, intravenous administration, effect, *Friedberg and Greenberg,* 411
Glycine, total amino acids, relation, *Gutman and Alexander,* 527
Stilbamidine determination, fluorophotometric, *Saltzman,* 699
Uric acid determination, enzymatic, *Block and Geib,* 747
Blood cell(s): White, ascorbic acid determination, micro-, *Bessey, Lowry, and Brock,* 197
Blood plasma: Amino acid nitrogen, *Brewer, Brown, Harvey, and Horwitt,* 145
— — —, pregnancy, labor, and puerperium, *Bonsnes,* 345
— nitrogen, pregnancy, labor, and puerperium, *Bonsnes,* 345
Blood platelet(s): Ascorbic acid determination, micro-, *Bessey, Lowry, and Brock,* 197
Blood serum: Iodine, determination, redistilled water and amylose use, *Man and Siegfried,* 119
Phosphorus, inorganic, parathyroid hormone determination, relation, *Tepperman, L'Heureux, and Wilhelmi,* 151
Blood sugar: *See also* Hyperglycemia
Body: Composition, *Pace, Kline, Schachman, and Harfenist,* 459

C

Calcified tissue(s): Phosphorus, radioactive, uptake, choline deficiency, *Neuman and Riley,* 545
Carbohydrate(s): Lactic acid bacteria, acid production, effect, *Camien, Dunn, and Salle,* 33
Cardiolipin: *Pangborn,* 351
Carrot: Phosphorus-containing lipides, *Hanahan and Chaikoff,* 233
Casein: Livers, fatty, effect, *Chaikoff, Entenman, and Montgomery,* 177
Chick: Phenylalanine and tyrosine, *Grau,* 485
Chloride(s): Determination, Schales-Schales, hydrogen ion concentration effect, *Asper, Schales, and Schales,* 779
Choline: -Deficient diet, radioactive phosphorus uptake, calcified tissues, *Neuman and Riley,* 545
Cholinesterase: *Rothenberg and Nachmansohn,* 223
Electric tissue, purification, ammonium sulfate use, *Rothenberg and Nachmansohn,* 223
Chymotrypsin: Tyrosinase effect, *Edman,* 367
Coproporphyrin: Isomers, urine, determination, micro-, *Schwartz, Hawkinson, Cohen, and Watson,* 133
Creatine: Phospho-, hydrolysis, urine creatinine, relation, *Borsook and Dubnoff,* 493
Creatinine: Urine, phosphocreatine hydrolysis, relation, *Borsook and Dubnoff,* 493

D

Dehydrogenase: Succinic, succinic acid, deuterium-labeled, effect, *Weinmann, Morehouse, and Winzler,* 717

Desoxyribonuclease: Bacterial virus properties, use in study, *Cohen,* 511

Deuterium: -Labeled succinic acid, succinic dehydrogenase effect, *Weinmann, Morehouse, and Winzler,* 717

Diabetes: Alloxan, liver phosphatase, effect, *Drabkin and Marsh,* 777

Diazonium salt(s): Organic compounds, basic, biological material, determination, use, *Brodie, Udenfriend, and Taggart,* 327

Dicarboxylic amino acid(s): Liver proteins, turnover, *in vitro, Anfinsen, Beloff, Hastings, and Solomon,* 771

Dihydroxyphenylalanine: Oxidation, dopa oxidase effect, *Mason,* 433

Dimethylaminobenzaldehyde: *p*-, tryptophane determination, use in, *Graham, Smith, Hier, and Klein,* 711

Dinicotinylornithine: Nicotinamide metabolite, *Dann and Huff,* 121

Diphosphopyridine: Nucleotide, preparation, *LePage,* 623

Disaccharide: Synthesis, enzymatic, *Doudoroff, Hassid, and Barker,* 733

Distribution studies: *Williamson and Craig,* 687

Djenkolic acid: Synthesis, *Armstrong and du Vigneaud,* 373

Dopa oxidase: Dihydroxyphenylalanine oxidation, effect, *Mason,* 433

E

Egg: Phenylalanine, *Grau,* 485
Tyrosine, *Grau,* 485

Electric tissue: Cholinesterase purification, ammonium sulfate use, *Rothenberg and Nachmansohn,* 223

Endocrine(s): Blood amino acids, effect, *Friedberg and Greenberg,* 405
Tissue amino acids, effect, *Friedberg and Greenberg,* 405

Enzyme(s): Blood uric acid determination, use in, *Block and Geib,* 747

Enzyme(s)—*continued:*
Disaccharide, synthesis by, *Doudoroff, Hassid, and Barker,* 733
Glucose-transferring, sucrose phosphorylase, relation, *Doudoroff, Barker, and Hassid,* 725
Glutamine synthesis, *Speck,* 403
Liver, testosterone, effect, *Samuels, McCaulay, and Sellers,* 477
See also Cholinesterase, Chymotrypsin, Dehydrogenase, Desoxyribonuclease, Hexokinase, Oxidase, Pectase, Pepsin, Phosphatase, Phosphorylase, Transglucosidase, Trypsin, Tyrosinase

Esterase: Choline. *See* Cholinesterase

F

Fat(s): Body, α-, β-, and γ-tocopherols, deposition and antioxygenic behavior, *Lundberg, Barnes, Clausen, Larson, and Burr,* 379
-Mobilizing agent, urine, *Weil and Stetten,* 129

Flaxseed: Mucilage, *Anderson and Lowe,* 289

Fluorescent compound(s): Biological material, determination, *Brodie, Udenfriend, Dill, and Downing,* 311

Folic acid: *See also* Pteroylglutamic acid

Formaldehyde: -Protein reaction, *Fraenkel-Conrat, Brandon, and Olcott,* 99
— —, gramicidin relation, *Fraenkel-Conrat, Brandon, and Olcott,* 99
— —, indole groups, relation, *Fraenkel-Conrat, Brandon, and Olcott,* 99

G

Glucose: Renal threshold mechanism, *Marsh and Drabkin,* 61
Tolerance, scurvy, relation, *Banerjee and Ghosh,* 207
-Transferring, sucrose phosphorylase, mechanism, *Doudoroff, Barker, and Hassid,* 725

Glucosidase: Trans-. *See* Transglucosidase

Glutamic acid: *d*(−)- and *l*(+)-, protein hydrolysates, determination, *Dunn, Camien, Shankman, and Block*, 43
Pteroyl-, related compounds and, determination, chemical, *Hutchings, Stokstad, Boothe, Mowat, Waller, Angier, Semb, and SubbaRow*, 705
—, sulfasuxidine-induced deficiency, tyrosine oxidation, liver, *Rodney, Swendseid, and Swanson*, 395
—, utilization, chick, *Jukes and Stokstad*, 563
Pteroyltri-, utilization, chick, *Jukes and Stokstad*, 563
Glutamine: Synthesis, enzymatic, *Speck*, 403
Glycine: Blood, total amino acids, relation, *Gutman and Alexander*, 527
Body fluids, *Christensen, Cooper, Johnson, and Lynch*, 191
Protein hydrolysates, determination, *Leuconostoc mesenteroides* use, *Shankman, Camien, and Dunn*, 51
Glycogen: Liver, scurvy, relation, *Banerjee and Ghosh*, 207
Glycosuria: Phlorhizin, kidney phosphatase, *Marsh and Drabkin*, 61
Gramicidin: Formaldehyde-protein reaction, *Fraenkel-Conrat, Brandon, and Olcott*, 99

H

Hexokinase: Reaction, adrenal cortex, anterior pituitary, and insulin, effect, *Colowick, Cori, and Slein*, 583
Hippuric acid: Synthesis, liver homogenate, *Borsook and Dubnoff*, 397
Hydrogen: Radioactive, body water determination, use in, *Pace, Kline, Schachman, and Harfenist*, 459
Hyperglycemia: Alimentary, kidney phosphatase, *Marsh and Drabkin*, 61

I

Indole: Groups, formaldehyde-protein reaction, relation, *Fraenkel-Conrat, Brandon, and Olcott*, 99
Tryptophane synthesis from, by *Lactobacillus arabinosus*, vitamin B_6 rôle, *Schweigert*, 283
Indole-3-acetic acid: Bacteriophage synthesis, effect, *Cohen and Fowler*, 775
Insulin: Hexokinase reaction, effect, *Colowick, Cori, and Slein*, 583
Pancreas, scurvy, relation, *Banerjee and Ghosh*, 207
Pancreatectomy and, fatty livers, casein effect, *Chaikoff, Entenman, and Montgomery*, 177
Iodine: Blood serum, determination, redistilled water and amylose use, *Man and Siegfried*, 119
Isoserine: Absorption, gastrointestinal tract, *Schofield and Lewis*, 439
Metabolism, *Schofield and Lewis*, 439

K

Kidney: Glucose threshold, mechanism, *Marsh and Drabkin*, 61
Phosphatase, hyperglycemia, alimentary, *Marsh and Drabkin*, 61
—, phlorhizin glycosuria, *Marsh and Drabkin*, 61
Tubules, ammonia secretion, amino acid rôle, *Lotspeich and Pitts*, 611
See also Nephrectomy

L

Labor: Blood plasma amino acid and amino nitrogen, *Bonsnes*, 345
Lactic acid: Bacteria, acid production, carbohydrate effect, *Camien, Dunn, and Salle*, 33
—, amino acid requirements, *Dunn, Shankman, Camien, and Block*, 1
—, vitamin requirements, *Shankman, Camien, Block, Merrifield, and Dunn*, 23
Lactobacillus arabinosus: Tryptophane synthesis from indole and anthranilic acid by, vitamin B_6 rôle, *Schweigert*, 283
Lactobacillus bulgaricus: Lactose utilization, *Hoff-Jørgensen, Williams, and Snell*, 773
Lactose: *Lactobacillus bulgaricus* utilization, *Hoff-Jørgensen, Williams, and Snell*, 773
Lavendulin: *Actinomyces* - produced, *Junowicz-Kocholaty and Kocholaty*, 757

Leucocyte: *See* Blood cell, white
Leuconostoc mesenteroides: Glycine determination, protein hydrolysates, use in, *Shankman, Camien, and Dunn,* 51
Lipide(s): Phosphorus-containing, carrot, *Hanahan and Chaikoff,* 233
Liver: Antifatty factor, pancreas, mechanism, *Chaikoff, Entenman, and Montgomery,* 177
Enzymes, testosterone, effect, *Samuels, McCaulay, and Sellers,* 477
Fatty, pancreatectomy with insulin, casein effect, *Chaikoff, Entenman, and Montgomery,* 177
Glycogen, scurvy, relation, *Banerjee and Ghosh,* 207
Homogenate, hippuric acid synthesis, *Borsook and Dubnoff,* 397
Phosphatase, alloxan diabetes, effect, *Drabkin and Marsh,* 777
Proteins, dicarboxylic amino acids, turnover, *in vitro, Anfinsen, Beloff, Hastings, and Solomon,* 771
Sugar oxidation, *Wainio,* 569
Tyrosine oxidation, sulfasuxidine-induced, pteroylglutamic acid deficiency, *Rodney, Swendseid, and Swanson,* 395

M

Manganese: Biological materials, determination, colorimetric, micro-, 4,4′-tetramethyldiaminotriphenylmethane use, *Gates and Ellis,* 537
Melanin: Chemistry, *Mason,* 433
Methane: 4,4′-Tetramethyldiaminotriphenyl-, manganese determination, colorimetric, micro-, biological materials, use in, *Gates and Ellis,* 537
Methylnicotinamide: N^1-, 6-pyridone, urine, isolation, *Knox and Grossman,* 363
—, tryptophane conversion, vitamin B_6 deficiency, effect, *Schweigert and Pearson,* 555
Methyl orange: Organic compounds, basic, biological material, determination, use, *Brodie, Udenfriend, and Dill,* 335
Monochlorophenoxyacetic acid(s): Metabolism, *Levey and Lewis,* 213
Mucilage: Flaxseed, *Anderson and Lowe,* 289

N

Naphthoquinone(s): Respiration, effect, *Ball, Anfinsen, and Cooper,* 257
Nephrectomy: Radioactive phosphorus metabolism, effect, *Tweedy, Chilcote, and Patras,* 597
Nicotinamide: Dinicotinylornithine, metabolite, *Dann and Huff,* 121
N^1-Methyl-, 6-pyridone, urine, isolation, *Knox and Grossman,* 363
—, tryptophane conversion, vitamin B_6 deficiency, effect, *Schweigert and Pearson,* 555
Nicotinic acid: Tryptophane conversion, vitamin B_6 deficiency, effect, *Schweigert and Pearson,* 555
Nitrogen: Amino. *See* Amino nitrogen
— acid, blood plasma, *Brewer, Brown, Harvey, and Horwitt,* 145
— —, — —, pregnancy, labor, and puerperium, *Bonsnes,* 345
Nuclease: Desoxyribo-, bacterial virus properties, use in study, *Cohen,* 511
Nucleic acid(s): Hydrolysates, purine separation and characterization, *Vischer and Chargaff,* 781
Nucleotide: Diphosphopyridine, preparation, *LePage,* 623

O

Organic compound(s): Basic, biological material, determination, *Brodie, Udenfriend, and Baer,* 299
Brodie, Udenfriend, Dill, and Downing, 311
Brodie, Udenfriend, Dill, and Chenkin, 319
Brodie, Udenfriend, and Taggart, 327
Brodie, Udenfriend, and Dill, 335
Josephson, Udenfriend, and Brodie, 341
—, — —, —, diazonium salts, use, *Brodie, Udenfriend, and Taggart,* 327

Organic compound(s)—*continued:*
Basic, biological material, determination, methyl orange use, *Brodie, Udenfriend, and Dill,* 335
—, — —, —, ultraviolet spectrophotometry use, *Josephson, Udenfriend, and Brodie,* 341
Identification, micro, distribution studies, *Williamson and Craig,* 687
Ornithine: Dinicotinyl-, nicotinamide metabolite, *Dann and Huff,* 121
Oxidase: Dopa, dihydroxyphenylalanine oxidation, effect, *Mason,* 433
Oxidation: β, *Levey and Lewis,* 213

P

Pancreas: Antifatty liver factor, mechanism, *Chaikoff, Entenman, and Montgomery,* 177
Insulin, scurvy, relation, *Banerjee and Ghosh,* 207
Pancreatectomy: Fatty livers, casein effect, *Chaikoff, Entenman, and Montgomery,* 177
Parathyroid: Extract, radioactive phosphorus metabolism, effect, *Tweedy, Chilcote, and Patras,* 597
Hormone, determination, blood serum inorganic phosphorus relation, *Tepperman, L'Heureux, and Wilhelmi,* 151
—, preparation, *L'Heureux, Tepperman, and Wilhelmi,* 167
Pectase: Tomato, *Hills and Mottern,* 651
Penicillin(s): Separation and characterization, counter-current distribution use, *Craig, Hogeboom, Carpenter, and du Vigneaud,* 665
Pepsin: Tyrosinase effect, *Edman,* 367
Phenoxyacetic acid: Metabolism, *Levey and Lewis,* 213
Phenylalanine: Chick, *Grau,* 485
Egg, *Grau,* 485
Phlorhizin: Glycosuria, kidney phosphatase, *Marsh and Drabkin,* 61
Phosphatase: Kidney, hyperglycemia, alimentary, *Marsh and Drabkin,* 61
—, phlorhizin glycosuria, *Marsh and Drabkin,* 61
Phosphatase—*continued:*
Liver, alloxan diabetes, effect, *Drabkin and Marsh,* 777
Phosphate(s): Determination, micro-, *Soyenkoff,* 447
Phosphocreatine: Hydrolysis, urine creatinine, relation, *Borsook and Dubnoff,* 493
Phosphorus: -Containing lipides, carrot, *Hanahan and Chaikoff,* 233
Inorganic, blood serum, parathyroid hormone determination, relation, *Tepperman, L'Heureux, and Wilhelmi,* 151
Radioactive, metabolism, thyroidectomy, nephrectomy, and parathyroid extract administration, effect, *Tweedy, Chilcote, and Patras,* 597
—, uptake, calcified tissues, *Neuman and Riley,* 545
Phosphorylase: Sucrose, bacterial, *Doudoroff, Barker, and Hassid,* 725
Doudoroff, Hassid, and Barker, 733
—, glucose-transferring action, mechanism, *Doudoroff, Barker, and Hassid,* 725
Pituitary: Anterior, extract, hexokinase reaction, effect, *Colowick, Cori, and Slein,* 583
Platelet: *See* Blood platelet
Porphyrin: Copro-, isomers, urine, determination, micro-, *Schwartz, Hawkinson, Cohen, and Watson,* 133
Potassium: Biological fluids, determination, flame photometry, *Overman and Davis,* 641
Pregnancy: Blood plasma amino acid and amino nitrogen, *Bonsnes,* 345
Protein(s): -Formaldehyde reaction, *Fraenkel-Conrat, Brandon, and Olcott,* 99
— —, gramicidin relation, *Fraenkel-Conrat, Brandon, and Olcott,* 99
— —, indole groups, relation, *Fraenkel-Conrat, Brandon, and Olcott,* 99
Hydrolysates, *d*(−)- and *l*(+)-glutamic acid, determination, *Dunn, Camien, Shankman, and Block,* 43
—, glycine determination, *Leuconostoc mesenteroides* use, *Shankman, Camien, and Dunn,* 51

Protein(s)—*continued:*
Incomplete, amino acid excretion, effect, *Pearce, Sauberlich, and Baumann,* 271
Liver, dicarboxylic amino acids, turnover, *in vitro, Anfinsen, Beloff, Hastings, and Solomon,* 771
Pteroylglutamic acid: Related compounds and, determination, chemical, *Hutchings, Stokstad, Boothe, Mowat, Waller, Angier, Semb, and Subba-Row,* 705
Sulfasuxidine-induced deficiency, tyrosine oxidation, liver, *Rodney, Swendseid, and Swanson,* 395
Utilization, chick, *Jukes and Stokstad,* 563
Pteroyltriglutamic acid: Utilization, chick, *Jukes and Stokstad,* 563
Puerperium: Early, blood plasma amino acid and amino nitrogen, *Bonsnes,* 345
Purine(s): Nucleic acid hydrolysates, separation and characterization, *Vischer and Chargaff,* 781
Pyramin: Excretion, thiamine ingestion effect, *Mickelsen, Caster, and Keys,* 415
Pyridine: Diphospho-. *See* Diphosphopyridine

R

Renal: *See* Kidney
Ricin: Purification and properties, *Kabat, Heidelberger, and Bezer,* 629

S

Saccharide: Di-, synthesis, enzymatic, *Doudoroff, Hassid, and Barker,* 733
Scurvy: Glucose tolerance, relation, *Banerjee and Ghosh,* 207
Liver glycogen, relation, *Banerjee and Ghosh,* 207
Pancreas insulin, relation, *Banerjee and Ghosh,* 207
Seed: Flax-. *See* Flaxseed
Serine: Absorption, gastrointestinal tract, *Schofield and Lewis,* 439
Serine—*continued:*
Iso-, absorption, gastrointestinal tract, *Schofield and Lewis,* 439
—, metabolism, *Schofield and Lewis,* 439
Metabolism, *Schofield and Lewis,* 439
Sodium: Biological fluids, determination, flame photometry, *Overman and Davis,* 641
Soil: Bacillus. *See also Actinomyces*
Steroid(s): Metabolism, *Samuels,* 471 *Samuels, McCaulay, and Sellers,* 477
Stilbamidine: Blood, determination, fluorophotometric, *Saltzman,* 699
Urine, determination, fluorophotometric, *Saltzman,* 699
Streptidine: Streptomycin-streptobiosamine linkage, *Carter, Loo, and Skell,* 401
Streptobiosamine: Streptomycin-streptidine linkage, *Carter, Loo, and Skell,* 401
Streptomycin: Analysis, counter-current distribution method, *Titus and Fried,* 393
B, *Fried and Titus,* 391
Bacterial virus properties, use in study, *Cohen,* 511
Streptidine-streptobiosamine linkage, *Carter, Loo, and Skell,* 401
Succinic acid: Deuterium-labeled, succinic dehydrogenase effect, *Weinmann, Morehouse, and Winzler,* 717
Oxidation, sulfonic acids, structurally related, effect, *Klotz and Tietze,* 399
Succinic dehydrogenase: Succinic acid, deuterium-labeled, effect, *Weinmann, Morehouse, and Winzler,* 717
Sucrose: Phosphorylase, bacterial, *Doudoroff, Barker, and Hassid,* 725 *Doudoroff, Hassid, and Barker,* 733
—, glucose-transferring action, mechanism, *Doudoroff, Barker, and Hassid,* 725
Sugar(s): Oxidation, liver, *Wainio,* 569
Sulfactin: *Actinomyces*-produced, *Junowicz-Kocholaty, Kocholaty, and Kelner,* 765

Sulfasuxidine: -Induced pteroylglutamic acid deficiency, tyrosine oxidation, liver, *Rodney, Swendseid, and Swanson,* 395

Sulfonic acid(s): Succinic acids, structurally related, oxidation, effect, *Klotz and Tietze,* 399

T

Testosterone: Liver enzymes, effect, *Samuels, McCaulay, and Sellers,* 477

Tissue extracts, determination, *Samuels,* 471

Tetramethyldiaminotriphenylmethane: 4,4′-, manganese determination, colorimetric, micro-, biological materials, use in, *Gates and Ellis,* 537

Thiamine: Excretion, thiamine ingestion effect, *Mickelsen, Caster, and Keys,* 415

Thyroparathyroidectomy: Radioactive phosphorus metabolism, effect, *Tweedy, Chilcote, and Patras,* 597

Tocopherol(s): α-, β-, and γ-, fat, deposition and antioxygenic behavior, *Lundberg, Barnes, Clausen, Larson, and Burr,* 379

Tomato: Pectase, *Hills and Mottern,* 651

Transglucosidase: Glucose-transferring, enzyme, mechanism, *Doudoroff, Barker, and Hassid,* 725

Trypsin: Chymo-, tyrosinase effect, *Edman,* 367

Tyrosinase effect, *Edman,* 367

Tryptophane: Determination, *p*-dimethylaminobenzaldehyde use, *Graham, Smith, Hier, and Klein,* 711

N^1-Methylnicotinamide, conversion, vitamin B_6 deficiency, effect, *Schweigert and Pearson,* 555

Nicotinic acid, conversion, vitamin B_6 deficiency, effect, *Schweigert and Pearson,* 555

Synthesis from indole and anthranilic acid by *Lactobacillus arabinosus,* vitamin B_6 rôle, *Schweigert,* 283

Tyrosinase: Chymotrypsin, effect, *Edman,* 367

Pepsin, effect, *Edman,* 367

Trypsin, effect, *Edman,* 367

Tyrosine: Chick, *Grau,* 485

Egg, *Grau,* 485

Oxidation, liver, sulfasuxidine-induced pteroylglutamic acid deficiency, *Rodney, Swendseid, and Swanson,* 395

Tyrothricin: Fermentation liquors, determination, *Rittenberg, Sternberg, and Bywater,* 183

U

Uric acid: Blood, determination, enzymatic, *Block and Geib,* 747

Urine: Coproporphyrin isomers, determination, micro-, *Schwartz, Hawkinson, Cohen, and Watson,* 133

Creatinine, phosphocreatine hydrolysis, relation, *Borsook and Dubnoff,* 493

Fat-mobilizing agent, excretion, *Weil and Stetten,* 129

N^1-Methylnicotinamide 6-pyridone, isolation, *Knox and Grossman,* 363

Stilbamidine determination, fluorophotometric, *Saltzman,* 699

Sugar. *See also* Glycosuria

V

Virus: Bacteria, properties, streptomycin and desoxyribonuclease in study, *Cohen,* 511

Vitamin(s): B_1. *See also* Thiamine

B_6 deficiency, tryptophane conversion to N^1-methylnicotinamide and nicotinic acid, *Schweigert and Pearson,* 555

—, tryptophane synthesis from indole and anthranilic acid by *Lactobacillus arabinosus,* rôle, *Schweigert,* 283

C. *See also* Ascorbic acid

Lactic acid bacteria, requirements, *Shankman, Camien, Block, Merrifield, and Dunn,* 23

W

Water: Body, determination, radioactive hydrogen use, *Pace, Kline, Schachman, and Harfenist,* 459

Redistilled, blood serum iodine determination, use, *Man and Siegfried,* 119